

<p style="text-align: center;">MassDEP Solid Waste Regulation Revisions - 310 CMR 19.000 Information Session</p>

Handout # 1 - Agenda

AGENDA (Handout #1)

9:30 Overview – James Doucett (Handout #2)

- Handouts
- Background/Dates
- Training Scope

9:45 – Revisions to 19.000 except Waste Bans and BUD Process – Paul Emond (Handout #3)
Removed sections, permit criteria, liner revisions, TS/handling facilities O&M, other.

10:30 Waste Bans Revisions – James McQuade (Handout #4 – see separate Powerpoint presentation)

- New waste bans - ABC, metal and wood
- Revised waste ban guidance
- Submittal and review of waste ban plan modifications

11:30 Implementation Issues - Paul Emond (Handout #5)

- Compliance issues
 - Waste Bans
 - Other new or revised requirements
- Related regulatory and policy changes
 - Fee regulations (310 CMR 4.00), Revisions to Landfill Technical Guidance Manual, other.

12:00 Wrap-up - James Doucett (Handout #6)

- Final questions/issues/feedback
- Contacts
- BUD information/training sessions
- Resources – MassDEP website, other
- Follow-up

Handout #2 - Overview

A. Handouts

B. Background/Dates

5/2004 – Background documents available

6/2004 – Public Hearings

9/2004 – Close of comment period

10/7/05 – Promulgation and effective date

11/4/05 – Missing FAM pages published

11/15/05 – Response to comments on MassDEP web site

12/29/05 – Summary of changes on MassDEP web site

1/4/06 – Revised Waste Ban Guidance on MassDEP web site

4/1/06 – Revised/modified waste ban plans due

7/1/06 – Effective date of C&D material waste ban

C. Training Scope

The following summary of the proposed revisions to the Solid Waste regulations is taken from the 2004 Discussion Document. **Bolded text** identifies how those issues are to be addressed at today's information session.

The six (6) major revisions proposed for the Solid Waste Management Facility Regulations include:

1. Increasing the level of protection to public health, safety and the environment by revising the landfill liner standards to a double composite liner design standard.
 - **To be covered today including:**
 - **19.110 - revisions to liners**
 - **19.112 - minor final cover changes**
 - **19.200 - revisions to Transfer Stations/Handling Facilities O&M**
 - **19.038 - permit review criteria – application of setback criteria**
 - **Other changes – storm water, monitoring, etc.**
2. Adding several materials normally found in construction and demolition waste to the list of materials banned from disposal.
 - **19.017 Waste Bans revisions. To be covered today.**
3. Incorporating the same risk evaluation criterion adopted in the Site Assignment Regulations in June 2001.

- **Facility Impact Assessment (FIA). Dropped from 19.038. Only in Site Assignment Regulations, 310 CMR 16.00.**
4. Completely revamping the Beneficial Use Determination regulations to tailor the application and review process to the category of use to which a waste material is to be put and to the level of risk posed by the use.
 - **Not discussed at this information session. Separate sessions are being tentatively planned for around March 2006. MassDEP will provide advance notice of that date.**
 5. Eliminating the ash monofill requirement for ash landfills.
 - **Requirement for ash disposal in dedicated cell/landfill (monofilling) dropped, O&M requirements for ash monofills remains.**
 6. Eliminate the sections of the regulations that were time sensitive and are now obsolete.
 - **Basically sections 19.021, 19.022, 19.023 & 19.030(4). These had to do with repermitting facilities back in the early 90's.**

See also "Summary of Revised Solid Waste Management Regulations" copies of which are provided at today's session.

Handout # 3

310 CMR 19.000 – 19.083 Part I Revisions Pre 10/07/05 Version Vs. Post 10/07/05 Revisions

Pre 10/7/2005	Post 10/7/2005	Changes
<u>19.021: Transition Requirements for Existing Facilities</u>		Removed. No longer needed
<u>19.022: Accelerated Closure Schedules</u>		Removed. No longer needed
<u>19.023: Permit by Rule for Certain Existing Transfer Stations</u>		Removed. No longer needed
<u>19.030(4) Permit Application Requirements for Existing Facilities</u>		Removed. No longer needed
<u>19.038: Criteria for Review of Applications for a Permit or Permit Modification</u>	<u>19.038 Applicability and Review Criteria for a Permit or Permit Modification</u>	Name change only
<u>(1) Applicability of Permitting Criteria</u>	<u>(1) Applicability of Permitting Criteria</u>	Rewritten/reorganized/simplified
<u>19.038(2)(a) Criteria for Review of Applications for a Permit or Permit Modification.</u>	<u>19.038(2)(a) Criteria for Review of Applications for a Permit or Permit Modification</u>	Some language changes but essentially the same.

310 CMR 19.000 – 19.083
Part I Revisions
Pre 10/07/05 Version Vs. Post 10/07/05 Revisions

Pre 10/7/2005	Post 10/7/2005	Changes
19.038(2)(b) <u>Combustion Facilities and Handling Facilities</u> 19.038(2)(c) (c) <u>Landfills</u>	19.038(2)(b) <u>Combustion Facilities and Handling Facilities</u> 19.038(2)(c) <u>Landfills</u>	Application of setback distances depends on date of site assignment for that location. For: “facilities that were site assigned or had submitted an Administratively Complete site suitability report application to the Department before June 8, 2001”, then 19.000 setbacks apply (these are unchanged since 1994). For facilities that have a site assignment issued after 6/8/01 then setback requirements of 16.00 apply.
19.038(2)(d) <u>Recycling Criteria.</u>		This section removed. The 25% recycling requirement has been eliminated. Relying on waste bans.
	19.038(2)(d) Additional landfill Criteria	Relocated, but not new, landfill criteria – LFG, seismic
19.083 <u>Enforcement of Minimum Recycling Requirements</u>	19.083 <u>Enforcement of Minimum Recycling Requirements</u>	No longer valid. Will be removed.

310 CMR 19.100 – 19.110
Liner Section
Pre 10/7/2005 Version Vs. Post 10/7/2005 Revisions

Pre 10/7/2005	Post 10/7/2005	Changes
	<u>19.106: Quality Assurance and Quality Control Requirements</u>	New section. 19.106(4) Requires “testing” the completed liner system. For example - resistivity, flood test, other.
<u>19.106: Construction Certification</u>	<u>19.107: Construction Certification</u>	Same. Citation number change.
<u>19.110 Ground Water Protection Systems</u>	<u>19.110: Ground Water Protection Systems</u>	
<u>19.110(1) Ground Water Protection Systems</u>	<u>19.110(1) Ground Water Protection Systems</u>	General performance – No change
<u>19.110(2) General Design Standards</u>	<u>19.110(2) General Design Standards</u>	Added (e) Perimeter drainage (f) Bathtub effect (h) Static and seismic (i) Factor of Safety(FS)
<u>19.110(3) Minimum Liner Configuration</u> Liner : Composite	<u>19.110(4) Minimum Liner Configuration</u> Liner: Double composite	Revisions same as 3/8/02 double liner policy. Liner slope < 4:1 Double composite Primary; GCL, FML

310 CMR 19.100 – 19.110
Liner Section
Pre 10/7/2005 Version Vs. Post 10/7/2005 Revisions

Pre 10/7/2005	Post 10/7/2005	Changes
	or variation	<p style="text-align: center;">Secondary: Soil, GCL, FML</p> <p>Liner slope >4:1 Double liner (secondary composite, primary could be just FML)</p>
<u>(4) Ground Water Protection System Components</u>	<u>(3) Ground Water Protection System Components</u>	Changes reflect new liner requirements
	<u>19.110(5): Vertical Expansions Over Existing Fill</u>	<p>New section. Incorporates same requirements as are in 3/8/02 double liner policy.</p> <p>Presumptive design: If existing composite or double liner and slope > 4:1 (“piggyback), operating for 2 years or more, handling MSW then just hydraulic separation layer such as a FML. Many situations/configurations are possible</p>
<u>(5) Subgrade Layer Standards</u>	<u>(6) Subgrade Layer Standards</u>	Section number change
<u>(6) Low Permeability Layer (Liner) Standards</u>	<u>(7)(b)3 Low Permeability Layer (Liner) Standards.</u>	Addition of GCL as suitable low permeability material
<u>(7) Drainage/Protection Layers</u>	<u>(8) Drainage/Protection Layers</u>	<p>Revised/expanded section Expanded geonet section</p>

310 CMR 19.100 – 19.110
Liner Section
Pre 10/7/2005 Version Vs. Post 10/7/2005 Revisions

Pre 10/7/2005	Post 10/7/2005	Changes
(8) <u>Leak Detection and Secondary Collection Systems Between Liners</u>	(9) <u>Leak Detection and Secondary Collection Systems Between Liners</u>	Revised/expanded section. Leak detection/secondary collection is now a requirement for all liner designs. Action leakage rate (ALR) requirement Maximum allowable ALR is 100 GPAD
(9) <u>Primary Leachate Collection and Removal Systems</u>	(10) <u>Primary Leachate Collection and Removal Systems</u>	Some minor changes. Leachate pump access.
(10) <u>Leachate Storage Facilities</u>	(11) <u>Leachate Storage Facilities</u>	Addition. Comply with 314 CMR 18.00 holding tank regulations

310 CMR 19.100
Miscellaneous Revisions (final cover, storm water, ground water monitoring)
Pre 10/07/05 Version Vs. Post 10/7/05 Version

Pre 10/7/2005	Post 10/7/2005	Changes
<u>19.112: Landfill Final Cover Systems</u>		
	(6)(b)3 <u>Low Permeability Layer Standards</u>	New section. Added GCL. (Just like liner section)
	(7) (b) <u>Drainage Layers</u>	New section. 3. be designed so that the head in the drainage layer will not exceed the thickness of the drainage layer; 4. be designed based on the hydraulic loadings resulting from the actual materials used in the final cover system, such as the vegetative support layer infiltration rate;
	(9) <u>Vegetative Support/Protection Layer Standards.</u>	New section. Currently in landfill Technical Manual. 2. at least 8-9 inches of soil with an organic content of 8-10% capable of supporting the selected vegetation in conjunction with a 12-inch thick drainage layer for a total vegetative/protection layer depth of 20-21 inches.
<u>19.115: Storm Water Controls</u>	<u>19.115 Storm Water Controls</u>	Added reference to Wetlands Regulations and Storm Water policy. Control run-off from 24 hour, 25 year storm – same as pre 10/7/05. Added evaluate 100 year storm and control if practicable where flooding would be expected upstream or downstream.

310 CMR 19.100
Miscellaneous Revisions (final cover, storm water, ground water monitoring)
Pre 10/07/05 Version Vs. Post 10/7/05 Version

Pre 10/7/2005	Post 10/7/2005	Changes
19.132 <u>Environmental Monitoring Requirements</u>	19.132 <u>Environmental Monitoring Requirements</u>	Some of these revisions were already in the Landfill Technical Guidance Manual. Now codifying them in regulation.
19.132(1)(b)	19.132(1)(b)	Point of compliance – Maximum 150 meters.
19.132(1)(i)	19.132(1)(j)	Added Ambient surface water standards.
19.132(1)(h)3		Added 1,4 dioxane
19.132(1)(j)	19.132(k) & (l)	Establishing link to MCP, 310 CMR 40.0000. Adequately regulated provisions. Conduct assessment and corrective actions “as determined by the Department.”

310 CMR 19.200

Side by Side Comparison of Transfer Station/Handling Facility Solid Waste Regulations

Pre 10/7/2005 Version Vs. Post 10/7/2005 revisions

Pre 10/7/2005	Post 10/7/2005	Changes
<u>19.200: Preamble</u>	<u>19.200: Preamble</u>	No change
<u>19.201: Applicability</u>	<u>19.201: Applicability</u>	No change
<u>19.202: Definitions</u>	<u>19.202: Definitions</u>	No change
<u>19.203: Additional Requirements</u>	<u>19.203: Additional Requirements</u>	No change
<u>19.204: Transfer Station Facility Plan (Reserved)</u>	<u>19.204: Handling Facility Plan (Reserved)</u>	Name change
	<u>19.205 Handling Facility Design Requirements</u> (1) <u>Storm Water Controls</u>	New section. Same as for landfills at 19.115. Reference Wetlands regulations and Storm Water policy. Control run-off from 24 hour, 25-year storm. Evaluate 100-year storm.
<u>19.205: Equipment</u>	<u>19.205 Handling Facility Design Requirements</u>	No change just relocated.

310 CMR 19.200

Side by Side Comparison of Transfer Station/Handling Facility Solid Waste Regulations

Pre 10/7/2005 Version Vs. Post 10/7/2005 revisions

Pre 10/7/2005	Post 10/7/2005	Changes
	(2) <u>Equipment</u>	
<u>19.206: Weighing Facilities</u>	<u>19.205 Handling Facility Design Requirements</u> (3) <u>Weighing Facilities</u>	Expanded and relocated. More specific requirements. Weighing required for facilities > 100 TPD.
	<u>19.206: Construction and Demolition (C&D) Waste Processing Facilities Requirements</u>	New addition to 2005 regs 206(1) – Operations indoors 206(2) – Storing materials 206(3) - Storm water management
<u>19.207: Fire Protection</u>	<u>19.207: Handling Facility Operation and Maintenance Requirements</u> (20) <u>Fire Protection.</u>	Expanded. Hot load area required.
<u>19.208: Access Facilities</u>	<u>19.207:</u> (3) <u>Access to Facilities</u>	Some requirements moved to (4) <u>Security</u> and (5) <u>Posting of the Handling Facility</u>
	<u>19.207:</u>	New separate heading. Originally

310 CMR 19.200

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Pre 10/7/2005	Post 10/7/2005	Changes
	(4) <u>Security</u>	these requirements were in 19.208 Access Facilities.
	<u>19.207:</u> (5) <u>Posting of the Handling Facility</u>	New separate heading. Originally these requirements were in 19.208 Access Facilities.
19.209: Unloading Refuse	<u>19.207:</u> (6) <u>Unloading Refuse</u>	No change.
19.210: Control of Wind-blown Litter	<u>19.207:</u> (16) <u>Control of Wind-blown Litter</u>	Essentially the same. Some language change.
<u>19.211: Screening and/or Fencing</u>	<u>19.207</u> (23) <u>Screening and/or Fencing</u>	No change.
<u>19.212: Open Burning</u>	<u>19.207:</u> (24) <u>Open Burning</u>	Reference to 310 CMR 7.07 added.
<u>19.213: Special Wastes</u>	<u>19.207:</u>	Some language change.

310 CMR 19.200

Side by Side Comparison of Transfer Station/Handling Facility Solid Waste Regulations

Pre 10/7/2005 Version Vs. Post 10/7/2005 revisions

Pre 10/7/2005	Post 10/7/2005	Changes
	(7) <u>Special Wastes</u>	
19.214: Disposal of Bulky Waste	<u>19.207</u> (11) <u>Bulky Waste</u>	More specific language added.
<u>19.215: Recycling Operations</u>	<u>19.207</u> (21) <u>Recycling Operations</u>	No change
<u>19.216: Dust Control</u>	<u>19.207</u> (14) <u>Dust Control</u>	Some language added
<u>19.217: Insect and Rodent Control</u>	<u>19.207</u> (15) <u>Vector Control</u>	Birds and other vectors added.
<u>19.218: Accident Prevention and Safety</u>	<u>19.207</u> (19) <u>Accident Prevention and Safety</u>	Two-way radios and contact numbers required.
<u>19.219: Supervision of Operation</u>	<u>19.207</u> (2) <u>Supervision of Operation</u>	No change.
<u>19.220: Operational Records and Plan Execution</u>	<u>19.207</u> (22) <u>Records for Operational and Plan Execution</u>	Added requirement for annual report. Note: 207(22)(b)&(c) repeat 205(3)(a)&(b) (Weighing Facilities) and

310 CMR 19.200

Side by Side Comparison of Transfer Station/Handling Facility Solid Waste Regulations

Pre 10/7/2005 Version Vs. Post 10/7/2005 revisions

Pre 10/7/2005	Post 10/7/2005	Changes
		need to be deleted.
<u>19.221: Emergency Plan</u>		Deleted from 2005 regs
	<u>19.207</u> <u>(25) Inspection</u>	New section. Requires third party inspection on frequency determined by the Department
	<u>19.207</u> <u>(8) Banned or Restricted Solid Wastes</u>	New section Comply with approved waste ban plan.
	<u>19.207</u> <u>(9) Hazardous Waste</u>	New section
	<u>19.207</u> <u>(10) Household Hazardous Waste and Waste Oil Collection at Handling Facilities</u>	New section. Reference 310 CMR 30.000 requirements
	<u>19.207</u> <u>(12) Liquid Wastes</u>	New section Excludes handling liquid waste except those generated by households.

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Side by Side Comparison of Transfer Station/Handling Facility Solid Waste Regulations

Pre 10/7/2005 Version Vs. Post 10/7/2005 revisions

Pre 10/7/2005	Post 10/7/2005	Changes
	<u>19.207</u> (13) <u>Bird Hazards</u>	New section.
	<u>19.207</u> (17) <u>Staffing</u>	New section.
	<u>19.207</u> (18) <u>Employee Facilities</u>	New section.

Handout #5 – Implementation and Compliance Issues

A. Major Implementation and Compliance Issues

1. General

- The revisions apply to new or modified activities from this point forward.
 - Facilities with permits that were valid prior to 10/7/05 are considered still in compliance with the revised regulations unless and until the situations below apply.
- Waste Bans
 - Waste Bans Plans due 4/1/06, effective 7/1/06
 - Facilities that fail to submit a modified waste ban plan on time will be subject to enforcement actions.
- Beneficial Use Determinations (BUDs) must follow the revised regulations.
 - Draft guidance can be used as a resource until final guidance is available. See Policy and Guidance Archive on MassDEP website:
 - <http://www.mass.gov/dep/recycle/laws/polarchv.htm>
 - Pre-application meetings as identified in the regulations are encouraged to facilitate the submission of a complete application.
- Other situations requiring compliance with the revised regulations.
 - When the Department requires modifications to address a public health, safety or environmental issue.
 - The Department has always had the authority to require a facility to upgrade its operations to prevent adverse impacts to public health and the environment.
 - When a facility requests a permit modification for an expansion or other major modification or a permit renewal. Applications for such modifications will need to address all applicable revisions in the regulations.

2. Transfer Stations/Handling Facilities.

- During routine compliance inspections the facility will be held to its permitted requirements. Failure to meet the permit requirements will be handled through standard enforcement actions.
- In addition, the Department will be sending letters shortly requiring each facility to comply with the third party inspections of section 19.207(25), if the facility does not already have an inspection requirement in its permit.
 - i. The first inspection performed will be required to evaluate the facility for compliance with the revised regulations. That inspection report will identify discrepancies and what actions would have to be taken to bring the facility into compliance with the revised regulations and a schedule. The Department will evaluate those reports and, working with the facility, will then determine a schedule and permit application requirements, if any, for implementing the modifications. The results of all Department determinations will be provided to the facilities in writing.

- ii. It is anticipated that all facilities will be required to have upgraded their operations by no later than January 1, 2008.

3. Landfills.

- During routine compliance inspections and/or review of monitoring reports the facility will be held to its permitted requirements. Failure to meet the permit requirements will be handled through standard enforcement actions.
- Liner requirements are already in place due to 2002 policy.
- The requirement in the pre 10/7/05 regulations at 19.132(1)(i) to compare monitoring results to certain standards now requires that surface water results be compared to Ambient Water Quality Standards (314 CMR 4.00) [see 19.132(10)(j)].
- Also, the Department will be sending a letter shortly to all landfill facilities about the need to address revisions to monitoring requirements such as 1,4 dioxane sampling requirements.

B. Related Regulatory and Policy Issues

- **Fee regulations revisions:**
 - Promulgated 10/7/05
 - Removed existing facility permits
 - Added closure completion BWPSW43 [19.140(6)]
 - Replaced 2 BUD categories with 4 new ones – BWPSW 39, 40, 41, 42
- All new forms available on line

4. Landfill Technical Guidance Manual

- Revisions targeted for Spring

Handout #6 – Wrap-up

A. Final Questions/issues/feedback

- Is there anything that would be helpful to you as we move to implement the revised regulations?

B. Resources

- MassDEP Website
 - Home page: <http://www.mass.gov/dep/>
 - Solid waste regulations and policies:
<http://www.mass.gov/dep/recycle/laws/regulati.htm>
 - Unofficial copies of;
 - Solid waste Facility Regulations - 310 CMR 19.000
 - Site Assignment Regulations – 310 CMR 16.00
 - Summary of October 2005 Regulation changes:
<http://www.mass.gov/dep/recycle/laws/regulati.htm>
 - Response to Comments document:
<http://www.mass.gov/dep/recycle/laws/regulati.htm>
 - Solid waste policies and guidance
 - Waste Ban Guidance:
<http://www.mass.gov/dep/recycle/solid/cdwbguid.doc>
 - BUD draft guidance: <http://www.mass.gov/dep/recycle/laws/polarchv.htm>
 - Draft Facility Impact Assessment Guidance:
<http://www.mass.gov/dep/images/fiaguid.doc>
 - Including Appendix B: Guidance for the Assessment of Groundwater and Surface Water for Solid Waste Facility Site Assignment and Permitting
 - Storm water Management Policy
 - <http://www.mass.gov/dep/water/laws/2103ch.doc>
 - Industrial Wastewater Holding Tank Regulations – 314 CMR 18.00
 - <http://www.mass.gov/dep/water/laws/regulati.htm#iww>

Contacts

- Solid Waste Regulations – general
 - James Doucett 617 292-5868
 - Paul Emond 617 292-5974
- Beneficial Use Regulations
 - Sean Griffin 617 292-5967
- Groundwater monitoring and related
 - Abdul Turay 617 292-5522

Follow-up

Beneficial Use Regulations sessions in March
Separate mailing will be made

